

## INTRODUCTION

Smoking is the single most preventable cause of morbidity and mortality in the United States.

Smoking is a major risk factor for cardiovascular disease, chronic obstructive pulmonary disease, cancer, hypertension, diabetic complications and osteoporosis.<sup>1,2</sup> Tobacco use causes more than 430,000 deaths, and costs the United States between \$50 and \$73 billion in medical expenses each year.<sup>3,4</sup>

In 1995, 47 million U.S. adults 18 years of age and older reported that they were current smokers. Approximately 70% of current smokers expressed their desire to quit smoking completely, while almost 46% reported they had stopped smoking for at least one day in the preceding 12 months.<sup>5</sup>

Approximately 13% of people 65 and older reported that they were smokers in 1995.<sup>5</sup> Today's older smokers grew up in an era in which advertisers, even physicians, promoted smoking; the adverse effects of smoking had not yet been established. The consequences of smoking among this cohort are now evident. In 1990, smoking caused over 287,000 deaths in the U.S. among persons age 65 and older--about 70% of the U.S. smoking-related deaths that year.<sup>6</sup>

Zhang and colleagues estimated that smoking-related illnesses accounted for about \$14.2 billion in Medicare expenditures in 1993, about 9.4% of Medicare's total budget. More specifically, smoking accounted for 11.4% of hospital care, 11.3% of nursing home care, 5.9% of home health care, and 5.6% of ambulatory care.<sup>7</sup> It is estimated that between 1995 and 2015, tobacco-related diseases will cost Medicare about \$800 billion.<sup>8</sup>

There are significant benefits to smoking cessation, even after 30 or more years of regular smoking.<sup>9</sup> Data from the Established Population for the Epidemiological Study of Elderly (EPSE) indicate that smokers who quit have cardiovascular mortality rates similar to those of

nonsmokers, and that this benefit is unrelated to age or the time elapsed since cessation.<sup>10</sup> In one study, older smokers who already had coronary artery disease improved their survival and risk of heart attack by quitting.<sup>11</sup> In addition, according to Tell,<sup>12</sup> lung function and circulation begin to improve immediately after cessation. A person who smokes more than 20 cigarettes per day and who quits at age 65 can expect to increase his or her life expectancy by 2 to 3 years.<sup>13</sup> Quitting smoking also greatly increases the quality of life for seniors.

Unfortunately, older smokers may be less likely to perceive the health consequences of smoking. For example, according to a recent survey of members of the American Association of Retired Persons (AARP), 47% of smokers age 50 and over did not believe that quitting could improve their health. In addition, 45% did not believe that continuing to smoke could further damage their health.<sup>14</sup> Still, older smokers are more likely to achieve success in their cessation attempts than younger smokers are.<sup>15, 16</sup> Thus, although special emphasis needs to be applied in addressing the barriers to quitting among the elderly, age is not a significant obstacle to cessation interventions.

A number of interventions to improve smoking cessation have been studied, and many of these are recommended in clinical practice guidelines promulgated by various organizations.<sup>17</sup> To better understand such interventions in the Medicare population, the Health Care Financing Administration (HCFA), as part of its Healthy Aging project, commissioned an evidence-based systematic review of smoking cessation, the results of which are detailed in this report.

